=> fil req

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DICTIONARY FILE UPDATES: 6 APR 2008 HIGHEST RN 1012582-98-7

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## http://www.cas.org/support/stngen/stndoc/properties.html

=> d sta que 114

L12 STR

REP G1=(4-8) CH2 VAR G2=O/N/X NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE

3349 SEA FILE=REGISTRY SSS FUL L12

100.0% PROCESSED 57083 ITERATIONS SEARCH TIME: 00.00.01 3349 ANSWERS

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 14:47:27 ON 07 APR 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLRASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 7 Apr 2008 VOL 148 ISS 15
FILE LAST UPDATED: 6 Apr 2008 (20080406/ED)
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New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 181 bib abs hitstr retable tot

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L81 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
```

- 2003:509926 HCAPLUS Full-text AN
- 139:69696 DN
- ΤI Preparation of unsaturated polyether carboxylic acids for use in emulsion polymerization
- Falk, Uwe: Poelimann, Klaus: Ahrens, Hendrik IN
- PA Clariant G.m.b.H., Germany
- SO Eur. Pat. Appl., 6 pp.
- CODEN: EPXXDW
- Patent LA German

FAN.	CNT 1																	
	PATE	I TN	10.			KIN	D	DATE			APP:	LICAT	ION :	NO.		D2	ATE	
							-											
PI	EP 1	323	741			A2		2003	0702		EP :	2002-	2746	9		20	0021	210
	EP 1	323	741			A3		2003	1112									
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	SK		
	DE 1	.0163	3258			A1		2003	0710		DE :	2001-	1016	3258		20	0011	221
	BR 2	20020	0051	73		A		2004	0629		BR :	2002-	5173			20	0021	210
	US 2	20030	0124	261		A1		2003	0703		US :	2002-	3230	97		20	0021	218
	JP 2	2003	21291	39		A		2003	0730		JP :	2002-	3699	81		20	0021	220
PRAI	DE 2	2001-	-1016	5325	8	A		2001	1221									
AB	Pol	veth	ers	bear	ing	term	ina.	l uns	satd.	and	d ca	rboxy	gro	ups,	use	ful	as	

Polyethers bearing terminal unsatd, and carboxy groups, useful as polymerizable emulsifiers and in emulsion polymerization, are prepared Adding 160 g chloroacetic acid over 10 min to 730 g 10:4 polyethylene-polypropylene glycol at 50°, adding 62 g NaOH in 8 portions over 2 h, and heating at 70° for 2 h gave 952 g polyether with terminal allyl and CO2Na groups. Use of the product as a polymerizable emulsifier and comonomer in emulsion polymerization are exemplified.

126879-53-5, Polyethylene-polypropylene glycol

mono[(4-vinyloxy)butyl] ether RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of polyoxyalkylene unsatd. ethers with sodium chloroacetate)

- 126879-52-5 HCAPLUS RN
- CN Oxirane, 2-methyl-, polymer with oxirane, mono[4-(ethenyloxy)butyl] ether (CA INDEX NAME)

CM 1

CRN 17832-28-9

CMF C6 H12 O2 H2C==CH-O-(CH2)4-OH

> CM 2

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM

CRN 75-21-8

CMF C2 H4 O



L81 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

2001:579203 HCAPLUS Full-text AN

DN 135:167188

ΤI Polyalkylene glycol-modified organosiloxanes

IN Poelimann, Klaus; Pfueller, Oliver; Stankowiak, Achim

PA Clariant G.m.b.H., Germany

Ger. Offen., 8 pp. SO

CODEN: GWXXBX

DТ Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	DE 10020670	A1	20010809	DE 2000-10020670	20000427 <		
PRAI	DE 2000-10020670		20000427	<			

AB Title polymers are manufactured by reaction of SiH-containing organosiloxanes with CH2:CHO(CH2)kX(AO)mR [k = 1-20, X = 0 or N[(AO)mR], A = C2-4 alkylene, m = 5-900, R = H, C1-10 alkyl, or aryl] in the presence of transition metal catalysts.

ΙT 133990-87-1P 353759-41-8P

4

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(polyalkylene glycol reactant; manufacture of polyalkylene glycol-modified organosiloxanes by hydrosilylation)

- RN 133990-87-1 HCAPLUS CN Poly(oxy-1,2-ethanediy1),  $\alpha$ -[4-(ethenyloxy)buty1]- $\omega$ -methoxy-
- CN Poly(oxy-1,2-ethanediy1),  $\alpha$ -[4-(ethenyloxy)buty1]- $\omega$ -methoxy-(9CI) (CA INDEX NAME)

RN 353759-41-8 HCAPLUS

CN Oxirane, 2-methyl-, polymer with oxirane, mono[4-(ethenyloxy)butyl] ether, block (CA INDEX NAME)

CM 1

CRN 17832-28-9

CMF C6 H12 O2

H2C=CH-O-(CH2)4-OH

CM 2

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O

## RETABLE

Referenced Author	Year	VOL	PG	Re	eferenced Work	Referenced
(RAU)	(RPY)	(RVL)	(RPG)	1	(RWK)	File
	+	+====	+	+===		-+
Anon	1	1	1	EP	0777010 A2	HCAPLUS
Anon	1	1	1	EP	0819719 A2	HCAPLUS
Anon	1	1	1	EP	0995771 A2	HCAPLUS
Anon	1	1	1	DE	4215076 A1	HCAPLUS
Anon	1	1	1	IGB	802467 A	IHCAPLUS

- L81 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
- AN 2001:50128 HCAPLUS Full-text
- DN 134:116330
- TI Preparation and use of aqueous alkenyl ether polymer dispersions

KIND DATE

- IN Pollmann, Klaus; Ahrens, Hendrik; Stankowiak, Achim
- PA Clariant G.m.b.H., Germany
- SO Eur. Pat. Appl., 8 pp. CODEN: EPXXDW
- DT Patent
- LA German
- FAN.CNT 1

	PA	TENT.	NO.			LYTIAL	יום כ	410	A	PLICAL	TON NO.		DAIL	
PI	ΕP	1069	139			A2	20	001011	7 E	2000-	113547		200006	27 <
	ΕP	1069	139			A3	20	003031	2					
		R:	ΑT,	BE,	CH,	DE,	DK, E	ES, FF	, GB, G	GR, IT,	LI, LU	, NL,	SE, MC,	PT,
			IE,	SI,	LT,	LV,	FI, H	RO						
	DE	1993	9266			A1	20	001020	8 DI	1999-	1993926	6	199908	19 <
	DE	1993	9266			B4	20	006110	9					
	JP	2001	06433	32		A	20	001031	3 JI	2000-	211475		200007	12 <
	US	6391	923			B1	20	002052	1 U	2000-	615422		200007	13 <
	US	2002	01032	290		A1	20	002080	1 U	2002-	103903		200203	22 <
PRAI	DE	1999	-1993	32572	2	A	19	999071	3 <					
	DE	1999	-1993	39266	5	A	19	999081	9 <					
	US	2000	-615	122		A3	20	000071	3 <					

ADDITION NO

DATE

- AB The title dispersions are prepared by radical, aqueous polymerization of H20-insol. unsatd.compds. in the presence of the ethers

  CH2:CH(CH2)n[O(CH2)k]bZ(AO)mR [A = C2-4-alkylene; R = H, C1-4-alkyl; Z = O, N[(AO)mR]; b = 0, 1; k = 1-20; m = 5-900; n = 0, 1]. Reaction of 50.5 g 4-hydroxybutyl vinyl ether with 145 g propylene oxide and then 440 g ethylene oxide in the presence of NaOMe at 140° gave a macromer (I) with OH number 50.9 (mol. weight 1100) and I number 21 g/100 g, Persulfate-initiated polymerization of 300 g vinyl isodecanoate and 900 g vinyl acetate in the presence of 170 g 68 I emulsion at 80° gave a copolymer emulsion.
- IT 126879-52-5P, Polyethylene-polypropylene glycol
  mono[4-(vinyloxy)butyl] ether 133590-87-1P, Polyethylene glycol
  methyl [4-(vinyloxy)butyl] ether 32795-51-1P
  RL: IMF (Industrial manufacture); TEM (Technical or engineered material
  use); PREP (Preparation); USES (Uses)
  (macromers as emulsifying agents)
- RN 126879-52-5 HCAPLUS
- CN Oxirane, 2-methyl-, polymer with oxirane, mono[4-(ethenyloxy)butyl] ether (CA INDEX NAME)
  - CM 1
  - CRN 17832-28-9
  - CMF C6 H12 O2

```
H2C== CH-O-(CH2)4-OH
```

CM 2

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O

△ CH3

CM 4

CRN 75-21-8 CMF C2 H4 O

å

- RN 133990-87-1 HCAPLUS
- CN Poly(oxy-1,2-ethanediy1),  $\alpha$ -[4-(ethenyloxy)buty1]- $\omega$ -methoxy-(9CI) (CA INDEX NAME)

- RN 320785-51-1 HCAPLUS
- CN Poly(oxy-1,2-ethanediy1),  $\alpha$ -buty1- $\omega$ -[4-(ethenyloxy)butoxy]-(9CI) (CA INDEX NAME)

L81 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1999:819066 HCAPLUS Full-text

- DN 132:64668
- ${\tt TI} \quad {\tt Polymers} \ {\tt from} \ {\tt block} \ {\tt copolymerizable} \ {\tt monomers} \ {\tt and} \ {\tt their} \ {\tt use}, \ {\tt particularly} \ {\tt for} \ {\tt the} \ {\tt preparation} \ {\tt of} \ {\tt ionic} \ {\tt conductors}$
- IN Michot, Christophe; Gauthier, Michel; Vallee, Alain; Harvey, Paul-Etienne; Armand, Michel
- PA Hydro-Quebec, Can.
- SO Eur. Pat. Appl., 29 pp.
- CODEN: EPXXDW DT Patent
- LA French
- FAN.CNT 1

	PA	TENT				KIN		DATE		AP	PLI	CAT	ION	NO.		D	ATE		
PI		9672 9672	33			A1 B1		1999		EP	19	99-	1122	41		1	9990	525	<
		R:							FR,	GB, G	R,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
				SI,	LT,														
		2242				A1		1999						017			9980		
		2243				A1		2000	0110					103			9980		
		2275				A1		1999						736			9990		
		2000		23		A		2000	0606	JP	19	999-	1801	43		1	9990	525	<
	EP	1693	390			A1		2006	0823	EP	20	06-	4071			1	9990	525	<
				FR,	GB,	ΙT													
	US	2002	0128	364		A1		2002	0912	US	20	002-	1393	20		2	0020	507	<
	US	6492	449			B2		2002	1210										
	US	2003	0125	437		A1		2003	0703	US	20	002-	3143	25		2	0021	209	<
	US	2004	0220	348		A1		2004	1104	US	20	04-	8600	17		2	00406	504	<
PRAI	CA	1998	-224	2017		A		1998	0625	<									
	CA	1998	-224	3103		A		1998	0710	<									
	US	1999	-337	251		В3		1999	0622	<									
	EP	1999	-112	241		A3		1999	0625	<									
	US	2002	-139	320		A1		2002	0507										
	US	2002	-314	325		A1		2002	1209										
AB	А	cross	link	able	nol	vmer	pr	epare	d by	anior	nic	pol	vme	rizat	ion	foli	owed	by	

- AB A crosslinkable polymer prepared by anionic polymerization followed by cationic crosslinking has the structure AnQYP [A = radical reactive in anionic polymerization; Q = direct link, CO, SO2, Cl-30 organic radical of valence n + p inert toward ionic polymerization; Y = radical reactive in cationic polymerization and inert to anionic polymerization initiators; n = 1-3; p = 1-6[]. Such polymers are capable of dissolving ionic compds., inducing elec. conductivity to form electrolytes. Thus, 110 g trimethylolpropane-initiated poly(ethylene oxide) prepared by anionic polymerization was dissolved in 250 mL THF, treated with tert-BuOK, and used to initiate polymerization of 86 g 1-glycidoxy-4- (vinyloxy)butane, after which the chain ends were capped by treatment with Me2SO4. A polymer electrolyte was obtained by treatment of an acetone solution of the block copolymer with LiClO4 and photochem. crosslinked after addition of [(BuOCSH4)IFh)+ -N(SO2F)2 to produce an elastomer with conductivity 10-5 S/cm at 25°.
- IT 253127-29-6P, Butylene oxide-ethylene oxide-1-glycidoxy-4-
  - (vinyloxy)butane copolymer 253127-30-9P, Ethylene
  - oxide-1-glycidoxy-4-(vinyloxy)butane copolymer
  - RL: IMF (Industrial manufacture); PREP (Preparation)
- (cationically crosslinkable; polymers from block copolymerizable monomers)
- RN 253127-29-6 HCAPLUS
- CN Oxirane, [[4-(ethenyloxy)butoxy]methyl]-, polymer with ethyloxirane and oxirane (9CI) (CA INDEX NAME)
  - CM 1
  - CRN 16801-21-1

CMF C9 H16 O3

CM 2

CRN 106-88-7

CMF C4 H8 O

CM 3

CRN 75-21-8

CMF C2 H4 O

## $\overset{\circ}{\triangle}$

RN 253127-30-9 HCAPLUS

CN Oxirane, [[4-(ethenyloxy)butoxy]methyl]-, polymer with oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 16801-21-1

CMF C9 H16 O3

CM 2

CRN 75-21-8

CMF C2 H4 O

å

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253127-30-95P, Ethylene oxide-1-glycidoxy-4-(vinyloxy)butane
     copolymer, lithium complexes
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (cationically crosslinkable; polymers from block copolymerizable
       monomers for preparation of ionic conductors)
RN
     253127-30-9 HCAPLUS
CN
    Oxirane, [[4-(ethenyloxy)butoxy]methyl]-, polymer with oxirane (9CI) (CA
     INDEX NAME)
     CM
          1
    CRN 16801-21-1
    CMF C9 H16 O3
```

CH2-0- (CH2) 4-0-CH-CH2

CM 2

CRN 75-21-8 CMF C2 H4 O

n

253127-29-60P, Butylene oxide-ethylene oxide-1-glycidoxy-4-(vinvloxy)butane copolymer, lithium complexes RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (cationically crosslinkable; polymers from block copolymerizable monomers for preparation of ionic conductors) 253127-29-6 HCAPLUS RN

Oxirane, [[4-(ethenyloxy)butoxy]methyl]-, polymer with ethyloxirane and oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 16801-21-1 CMF C9 H16 O3

CH2-0-(CH2)4-0-CH=CH2

CM 2

CRN 106-88-7 CMF C4 H8 O

 $\stackrel{\circ}{\smile}_{\text{CH}_2-\text{CH}_3}$ 

CM 3

CRN 75-21-8 CMF C2 H4 O

n

## RETABLE

Referenced Author (RAU)	(RPY)   (RV	L)   (RPG)		Referenced   File
	-+====+===:	==+=====	+	+=======
Christian, W	1992	1	US 5146005 A	HCAPLUS
Goldschmidt Ag Th	1991	1	EP 0421230 A	HCAPLUS
Hydro Quebec	1995	1	EP 0657485 A	HCAPLUS
Ji-Hong, K	1997	1	US 5665841 A	HCAPLUS
Rohm & Haas	11960 I	1	IGB 836046 A	1

- L81 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
- AN 1995:973537 HCAPLUS Full-text
- DN 123:343308
- TI Pretreating fabrics to impart improved soil release properties thereto using polymers of vinyl ethers
- IN Holland, Richard J.; Guiney, Kathleen M.; Baur, Richard; Kroner, Matthias PA USA
- SO Can. Pat. Appl., 30 pp.
- CODEN: CPXXEB
- DT Pagent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 2139010	A1	19950629	CA 1994-2139010	19941223 <
	CA 2139010	C	19990420		
	US 5514288	A	19960507	US 1993-174598	19931228 <
PRAI	US 1993-174598	A	19931228	<	

AB In the title process, fabrics are treated with polymers containing 99-1% units of vinyl ethers and 1-99% units of adducts of C2-4 alkylene oxides with vinyl ethers and/or polytetrahydrofuran vinyl ethers, and optionally containing units of other copolymerizable monomers. An oil-stained polyester fabric was treated with an aqueous solution containing 1.25% ethoxylated hydroxybutyl

vinyl ether-hydroxybutyl vinyl ether copolymer (I) and 5.5% Plurofac B-25-5 (surfactant) in a washing machine for 12 min at 150%F, dried, stained with dirty motor oil, and washed 12 min at 150%F to give a laundered fabric with soil release amount 95.4%, vs. 52.9% using no I.

IT 151313-98-3 151314-01-1

RL: TEM (Technical or engineered material use); USES (Uses) (finish; for pretreating fabrics to impart improved soil release properties)

151313-98-3 HCAPLUS

CN 1-Butanol, 4-(ethenyloxy)-, polymer with α-[4-(ethenyloxy)butyl]ω-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

RN

CRN 126682-74-4

CMF (C2 H4 O)n C6 H12 O2

CCI PMS

CM 2

CRN 17832-28-9

CMF C6 H12 O2

RN 151314-01-1 HCAPLUS

CN 1-Hexanol, 6-(ethenyloxy)-, polymer with α-[4-(ethenyloxy)butyl]ω-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 126682-74-4

CMF (C2 H4 O)n C6 H12 O2

CCI PMS

$$HO - CH_2 - CH_2 - O - In (CH_2) 4 - O - CH - CH_2$$

CM 2

CRN 27336-16-9

CMF C8 H16 O2

- L81 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
- AN 1993:652607 HCAPLUS Full-text
- DN 119:252607
- TT Polymers of hydroxyalkyl vinyl ethers for use in detergents
- Kroner, Matthias; Hartmann, Heinrich; Wolf, Gerhard; Baur, Richard; TN
- Diessel, Paul; Jaeger, Hans Ulrich; Schwendemann, Volker; Perner, Johannes PA
- BASF A.-G., Germany SO Ger. Offen., 20 pp.
- CODEN: GWXXBX
- DT Patent T.A
- German
- FAN.CNT 1

	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
PI	DE 4130428	A1 19930318	DE 1991-4130428	19910913 <
	WO 9306142	A1 19930401	WO 1992-EP2041	19920904 <
	W: CA, JP, US			
	RW: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IE, IT, LU, MC,	NL, SE
	EP 603236	A1 19940629	EP 1992-918765	19920904 <
	EP 603236	B1 19951129		
	R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IE, IT, LI, LU,	MC, NL, SE
	ES 2080514	T3 19960201	ES 1992-918765	19920904 <
	US 5576407	A 19961119	US 1994-185971	19940210 <
PRAI	DE 1991-4130428	A 19910913	<	
	WO 1992-EP2041	W 19920904	<	
AB	Detergents with bet	tter primary and	secondary washing activi-	ty are prepared by

- radical or cationic copolymn. of 99-1% hydroxyalkyl vinyl ethers with 1-99% adduct of C2-4 epoxides with hydroxyalkyl vinyl ethers and/or polytetramethylene glycol vinyl ethers and 0-98% comonomers. Adding 86 g di-Et maleate, 86 g polyoxyethylated fatty alcs. (PFA), and 6 g tert-Bu peroxypivalate over 2 h to hydroxybutyl vinyl ether (I) 14, polyoxyethylated I (d.p. 3) 93, and PFA 93 g stirred at 70° and stirring for 2 h gave a copolymer (II) with K-value 14. Use of a mixture of 50% aqueous dodecylbenzenesulfonate 10, PFA 3, polypropylene glycol 2, H2O 77, and II 10 parts in washing a mixture of soiled fabrics, polyester fabric, and polyester-cotton blend is
  - exemplified. 151313-98-3P 151314-01-1DP, hydrolyzed
  - 151314-01-1P
    - RL: PREP (Preparation)
  - (detergents, manufacture of)
- RN 151313-98-3 HCAPLUS
- CN 1-Butanol, 4-(ethenyloxy)-, polymer with  $\alpha$ -[4-(ethenyloxy)butyl]ω-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)
  - CM 1
  - CRN 126682-74-4
  - CMF (C2 H4 O)n C6 H12 O2
  - CCI PMS

```
CM 2
    CRN 17832-28-9
    CMF C6 H12 O2
H2C=CH-O-(CH2)4-OH
RN
   151314-01-1 HCAPLUS
CN 1-Hexanol, 6-(ethenyloxy)-, polymer with α-[4-(ethenyloxy)butyl]-
    ω-hydroxypoly(oxy-1,2-ethanediy1) (9CI) (CA INDEX NAME)
    CM 1
    CRN 126682-74-4
    CMF (C2 H4 O)n C6 H12 O2
    CCI PMS
HO CH2-CH2-O CH2 (CH2) 4-O-CH CH2
    CM 2
    CRN 27336-16-9
    CMF C8 H16 O2
H2C==CH-O-(CH2)6-OH
RN 151314-01-1 HCAPLUS
   1-Hexanol, 6-(ethenyloxy)-, polymer with \alpha-[4-(ethenyloxy)butyl]-
    w-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)
    CM 1
    CRN 126682-74-4
    CMF (C2 H4 O)n C6 H12 O2
    CCI PMS
HO CH2-CH2-O (CH2)4-O-CH-CH2
```

CM 2

14

CRN 27336-16-9 CMF C8 H16 O2

H2C==CH-O-(CH2)6-OH

```
L81 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
```

AN 1991:610278 HCAPLUS Full-text

DN 115:210278

TI Weather-resistant water-based fluoropolymer coating compositions

IN Kanba, Motoi; Washida, Hiroshi; Ishida, Toru

PA Asahi Glass Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APE	PLICATION NO.	DATE
PI	JP 03088882	A	19910415	JP	1989-285010	19891102 <
PRAI	JP 1989-159467	A1	19890623	<		
3.0	mb a contract to the contract of		63		2.1 - 1.1 - 1.1 - 1.1 - 1.2 - 1.1	

The title compns. comprise fluoropolymers, light stabilizers, and aqueous media. Thus, Et vinyl ether 22.1,  $\omega$ -hydroxybutyl vinyl ether 1.5, and CH2:CHO(CH2)4(OCH2CH2)nOH (number-average mol. weight 700) were emulsion polymerized in water in the presence of perfluoroctanic acid ammonium salt, K2CO3, NaHSO3, and KNH4)25208 with ice cooling, then treated with 38.0 parts chlorotrifluoroethylene at 30° to give a fluoropolymer aqueous dispersion, 100 parts of which was mixed with 6.4 parts 4-Ph 2, 4-dihydroxyphenyl ketone, then mixed with a film-forming aid, a leveling agent, and an antifoaming agent to give a coating, which was spread on a wood piece, then dried to give a test piece, which did not discolor after 500 h UV exposure.

IT 126879-52-5

RN

RL: MOA (Modifier or additive use); USES (Uses)

(water-based coatings, containing light stabilizers, weather-resistant) 126879-52-5 HCAPLUS

CN Oxirane, 2-methyl-, polymer with oxirane, mono[4-(ethenyloxy)butyl] ether (CA INDEX NAME)

CM 1

CRN 17832-28-9

CMF C6 H12 O2

H2C==CH-O-(CH2)4-OH

CM 2

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 3

CRN 75-56-9 CMF C3 H6 O



CM

CRN 75-21-8 CMF C2 H4 O

Å

L81 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1991:230754 HCAPLUS Full-text

DN 114:230754

ΤI Alkyl vinyl ether copolymers as antifoaming and leveling agents for resin systems, especially coating compositions

Haubennestel, Karl Heinz; Bubat, Alfred IN

PA Bvk-Chemie G.m.b.H., Germany

Ger. Offen., 19 pp. SO

CODEN: GWXXBX

DT Patent LA German

AB

FAN.	CNT 1			
	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
PI	DE 3901608	A1 1990072	6 DE 1989-3901608	19890120 <
	DE 3901608	C2 1991020	7	
	EP 379166	A2 1990072	5 EP 1990-100904	19900117 <
	EP 379166	A3 1992031	8	
	EP 379166	B1 1994071	3	
	R: AT, BE, CH	, DE, DK, ES, FR	, GB, GR, IT, LI, LU, NL	
	CA 2008077	A1 1990072	0 CA 1990-2008077	19900118 <
	CA 2008077	C 1999060	8	
	JP 02232271	A 1990091	4 JP 1990-10429	19900118 <
	JP 2550195	B2 1996110	6	
	US 5187201	A 1993021	6 US 1990-466149	19900119 <
PRAI	DE 1989-3901608	A 1989012	0 <	

The title copolymers contain units CH(OR)CH2 (R = C1-18 alkyl, CmF2m+1CH2CH2; m = 4-18) and units CH(OX)CH2 [X = (CH2)xO(CH2CHR10)yR2, (CH2CHR10)zR3, (CH2)x0[CO(CH2)50]pR2, (CH2)x0[CO(CH2)50]p (CH2CHR10)yR2, etc.; R1 = H, Me; R2 = H, C1-4 alkyl, Ac, benzyl; R3 = C1-22 alkyl, Ph substituted by 1-3 C1-9 alkyl groups; x = 2-6; y = 0-50; z = 1-50; p = 1-15] in 100: (1-100) ratio, have good compatibility with resin systems, are self-emulsifying in aqueous resin systems, and give good foam control and leveling. Thus, a copolymer (weight-average mol. weight 2230) prepared from 160 g iso-Bu vinyl ether and 40 q H2C:CHO(CH2)40 (CH2CH2O)8Me was used as a leveling agent in a photocurable furniture lacquer based on an unsatd. polyester and styrene. An

80:20 Et vinyl ether-triethylene glycol monovinyl ether copolymer was mixed with hydrophobic silica and used as an antifoaming agent in an aqueous lacquer based on an acrylate dispersion (Primal AC 4800).

IT 133990-90-6 RL: USES (Uses)

L: USES (USES)

(antifoaming and leveling agents, for coating compns.)

RN 133990-90-6 HCAPLUS

CN Poly(oxy-1,2-ethanediy1),  $\alpha$ -[4-(ethenyloxy)buty1]- $\omega$ -methoxy-, polymer with ethoxyethene (9CI) (CA INDEX NAME)

CM 1

CRN 133990-87-1

CMF (C2 H4 O)n C7 H14 O2

CCI PMS

CM

CRN 109-92-2 CMF C4 H8 O

H3C-CH2-O-CH-CH2

L81 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1977:486067 HCAPLUS Full-text

DN 87:86067

OREF 87:13695a,13698a

TI Double-layer globular gel particles for molecular sieves

IN Motozato, Yoshiaki; Hirayama, Chuichi

PA Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent LA Japanese

LA Japane

FAN.CNT 1

	PATENT NO.	KIND DATE		APPLICATION NO.	DATE		
PI	JP 52011184	A	19770127	JP 1975-86683	19750717 <		
PRAI	JP 1975-86683	A	19750717	<			

Double-layer globular polymer gel particles useful for mol. sieves are prepared Thus, a mixture of 700 mL 1% aqueous gelatin, 100 mL vinyl acetate, and 3 g Bz202 was suspension polymerized 15 h at 60° to give poly(vinyl acetate) (1) particles which were saponified 1 hr at 60° with a solution cong. 23 g Na2SO4 an 200 mL 5N NaOH, and mixed with 15 mL MeOH, giving poly(vinyl alc.) (II) [9002-89-5]-coated 7 particles. The II-coated particles were dipped in 10N NaOH solution at room temperature for 1 h, taken out, treated with 500 mL kerosine oil containing 15 mL epichlorohydrin at 60° for 24 h to give particles with crosslinked outer surface. The particles were treated

with petroleum ether and then saponified with 300 mL 5 N NaOH solution containing 100 mL MeOH at 60° for 24 h (inner layer was completely converted to II) to give 43.5 g hydrophilic double-layer gel particles useful for mol. sieves. 29720-48-7 RL: USES (Uses) (gels, double-layer, for mol. sieves) 29720-48-7 HCAPLUS Ethenol, polymer with 1.4-bis(ethenyloxy)butane (9CI) (CA INDEX NAME) CM 1 CRN 3891-33-6 CMF C8 H14 O2 H2C=CH-O-(CH2)4-O-CH=CH2 CM 2 CRN 557-75-5 CMF C2 H4 O H2C==CH-OH L81 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN 1968:30410 HCAPLUS Full-text DN 68:30410 OREF 68:5943a,5946a Heat-stable copolymers of vinyl chloride TI Toyoshima, Kiyoshi; Nakamura, Keishu; Ban, Koichi; Ito, Koreatsu PA Sumitomo Chemical Co., Ltd. SO Jpn. Tokkvo Koho, 4 pp. CODEN: JAXXAD Parent Japanese FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE 19670518 19630709 <--JP 42009671 B4 JP The heat stability and mech. properties of poly(vinyl chloride) were improved by copolymg, vinyl chloride (I) with divinyl ethers (0.01-10 weight % based on I). Thus, a mixture of I 100, H2O 150, poly(vinyl alc.) 0.1, lauroyl peroxide 0.1, and divinyl ether of butanediol 0.3 part was sealed in a 50-ml. glass tube under N and shaken at 55° for 17 hrs. to give a powdered polymer in 86% yield, d.p. 1740, softening point 75°, brittle point -3°, and impact strength 4.6 kg.-cm./cm.2 29720-48-7P, preparation RL: PREP (Preparation) (and heat stability and mech. properties of)

RN 29720-48-7 HCAPLUS

RN CN

AN

TN

DT

LA

PI

AB

CN Ethenol, polymer with 1,4-bis(ethenyloxy)butane (9CI) (CA INDEX NAME)

```
CM 1
    CRN 3891-33-6
    CMF C8 H14 O2
H2C=CH-O-(CH2)4-O-CH=CH2
    CM 2
    CRN 557-75-5
    CMF C2 H4 O
H 2 C == CH = OH
тт
    29720-48-7
     RL: PRP (Properties)
        (heat stability and mech. properties of)
     29720-48-7 HCAPLUS
RN
CN Ethenol, polymer with 1,4-bis(ethenyloxy)butane (9CI) (CA INDEX NAME)
    CM 1
    CRN 3891-33-6
    CMF C8 H14 O2
H2C=CH-O-(CH2)4-O-CH=CH2
    CM 2
    CRN 557-75-5
    CMF C2 H4 O
H 2 C == CH = OH
=> d his
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              E POLLMANN/AU
L2
            18 S E36, E37, E40-E43
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E AHRENS/AU
             3 S E3
               E AHRENS H/AU
L4
            85 S E3, E4, E16
               E STANKOWIAK/AU
L5
            35 S E4, E5
               E CLARIANT/CO
               E CLARIANT?/CO, PA, CS
L6
          2235 S CLARIANT?/CO.PA.CS
               E CLARIANT/CO
               E E39+ALL
               E E1+ALL
L7
           2234 S E2+RT OR E2-27/PA, CS
T.R
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               SEL RN
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L9
             7 S E1-E7
L10
               STR
L11
            50 S L10
L12
              STR L10
L13
            50 S L12
L14
          3349 S L12 FUL
               SAV TEMP L14 CHEUNG103/A
L15
           325 S L14 AND (C2H4O OR C2H6O2 OR C2H4CL2)
L16
             7 S L15 AND 1/NC
L17
             2 S L16 AND ("(C2H4O)NC10H20O2" OR "(C2H4O)NC7H14O2")/MF
1.18
             1 S L15 AND 2/NC AND 25322-68-3/CRN
L19
           123 S L15 AND 75-21-8/CRN
L20
           22 S L15 AND C2H6O2
L21
             0 S L15 AND C2H4CL2
L22
           82 S L19 AND (C3H6O OR C3H8O2 OR C3H6CL2)
L23
            41 S L19 NOT L22
             3 S L23 AND 2/NC
L24
L25
             2 S L24 NOT C9H14O3
L26
             8 S L23 AND CH40
L27
            1 S L26 AND "(C6H12O2.C4H8O.C2H4O)X.XCH4O"/MF
L28
           23 S L23 AND C4H8O
L29
            11 S L28 NOT (C6/ES OR F/ELS)
L30
             7 S L29 NOT C3H4O2
L31
             5 S L30 NOT C11H20O2
L32
             6 S L29 NOT L31
L33
             3 S L22 AND 3/NC
L3.4
           172 S L15 NOT L16-L33
L35
            19 S L34 AND 2/NC
               SEL RN 15 17 18 19
L36
             4 S L35 AND E8-E11
1.37
            30 S L34 AND 3/NC
L38
            23 S L37 NOT (S OR SI OR P OR F)/ELS
L39
             3 S L38 AND C6H12O2
L40
             1 S L39 AND C4H8O
L41
            35 S L34 AND 4/NC
L42
            17 S L41 NOT (S OR SI OR P OR F)/ELS
L43
               STR L12
L44
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L45
            0 S L45 CSS SAM SUB=L14
L46
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L47
L48
              STR L45
           50 S L48 SAM SUB=L14
L49
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L50
           2086 S L48 FUL SUB=L14
               SAV TEMP L50 CHEUNG103A/A
L51
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L52
           120 S L50 AND (C3H6O OR C3H8O2 OR C3H6CL2)
L53
           910 S L50 AND (C4H80 OR C4H1002 OR C4H8CL2)
L54
            84 S L51 AND L52
           101 S L51 AND L53
L55
L56
            27 S L52 AND L53
           186 S L54-L56
L58
             7 S L57 AND 3/NC
L59
            16 S L57 AND 4/NC
             1 S L59 AND "(C6H12O2.C4H8O.C2H4O)X.XCH4O"/MF
L60
             29 S L57 AND 5/NC
L61
L62
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L63
            17 S L17, L25, L27, L31, L33, L36, L58, L60
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1.64
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L65
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L66
             0 S L64 CSS FUL SUB=L14
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L67
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L68
             3 S L67 AND L1-L8
               E POELLMANN/AU
L69
             22 S E12
L70
             2 S L67 AND L69
L71
             3 S L68, L70
1.72
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L73
             9 S L67 AND (PD<=20000714 OR PRD<=20000714 OR AD<=20000714) AND P
L74
            10 S L71, L73
L75
             8 S L67 NOT L74
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L76
               TRA L74 1- RN :
                                     84 TERMS
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L77
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L78
             26 S L77 AND L14 NOT L63
                SEL RN L78 5 12-14 22-24 26
             8 S E1-E8 AND L78
L79
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L80
             2 S L70 AND L74
L81
             10 S L74, L80
     FILE 'REGISTRY' ENTERED AT 14:47:17 ON 07 APR 2008
     FILE 'HCAPLUS' ENTERED AT 14:47:27 ON 07 APR 2008
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